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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/847,447	05/02/2001	Roland M. Morley	INTL-0535-US (P10840)	7740
7590 06/28/2005			EXAMINER	
Timothy N. Trop TROP, PRUNER & HU, P.C. 8554 KATY FWY, STE 100 HOUSTON, TX 77024-1805			LEURIG, SHARLENE L	
			ART UNIT	PAPER NUMBER
			2879	

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Sm

Office Action Summary	Application No.	Applicant(s)	
	09/847,447	MORLEY ET AL.	
	Examiner	Art Unit	
	Sharlene Leurig	2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 12-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Moscovitch et al. (6,343,006).

Regarding claim 1, Moscovitch discloses a large format display comprising a plurality of emissive display modules (Figure 13), each module including at least two alignment elements (Figure 14, four protrusions on screen 18), a backframe (Figure 13, element 20) including a plurality of alignment devices (four holes in plate 86) to mate with the alignment elements of the display modules, wherein the alignment elements and alignment devices have mating depressions and protrusions.

Regarding claim 8, Moscovitch discloses emissive display modules that are computer screens, which have a transparent layer through which the light escapes the display to reach the user, and spaced light emissive cells formed on and behind that transparent layer to form a pixilated display with defining regions between the cells to define the pixels.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-6 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matthies et al. (6,370,019) (of record).

Regarding claim 1, Matthies discloses a large format display comprising a plurality of emissive display modules (Figure 1, elements 122 and 124). Each module has at least one alignment element in the form of "matching connectors" (column 6, line 49) that mate with alignment devices on the backframe (Figure 9, element 904). Since Matthies discloses the tiles being "plugged into" the backframe (column 6, line 37), the alignment devices and elements must comprise mating depressions and protrusions.

Matthies fails to exemplify the number of alignment elements provided on each module.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the modules of Matthies to have more than one alignment element per module in order to improve the stability and security of the attachment between the module and the backframe.

Regarding claim 2, Matthies discloses a module having a backplate (Figure 2, element 130) on which the alignment elements are formed (column 6, line 50).

Regarding claim 3, Matthies discloses a driver chip being located on the back surface of the display tile (Figure 7, element 134) and numerous emissive elements being formed on the front surface of the display tile (Figure 7, element 708).

Regarding claim 4, Matthies discloses fasteners extending from the backplate to attach it to the backframe (column 6, line 35).

Regarding claim 5, these fasteners disclosed by Matthies may comprise connectors which allow the backpanel to be "plugged into" the backframe, thereby engaging elements on the backframe to secure the backframe to the modules (column 6, line 37).

Regarding claim 6, the option disclosed by Matthies of plugging connectors into the backframe allows the backpanel to be removeably connected to the backframe to permit "the repair and replacement of the individual tiles" (column 6, line 39).

Regarding claim 8, as can be seen in Figure 6B, each module has a transparent layer 322 (column 9, line 20) and a plurality of spaced apart light emissive cells, elements 324, formed on the transparent layer, and separated by defining regions.

Regarding claim 9, Matthies discloses the deposition of a black, optically absorbing material "in all areas where metal electrodes will be later deposited" before placement of the row electrodes (column 10, line 63). Since the row electrodes (Figure 6B, element 328) extend between the emissive cells, the optically absorbent material overlays the region between the cells.

Regarding claim 10, Figure 8, element 802 of Matthies shows the bead seal along the periphery of each module between adjacent modules. The optically absorbing masking layer (Figure 8, element 804) covers the bead seals that lie on the peripheral

gaps between adjacent modules so when the tiled display is viewed from the top, no seal is seen.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matthies et al. (6,370,019) (of record) in view of Moscovitch et al. (6,343,006).

Matthies discloses fasteners extending from the backplate to attach it to the backframe, as discussed above, but lacks the specific type of a threaded fastener.

Moscovitch teaches the use of threaded fasteners (Figure 7, element 70) for securing one element to another in a display device.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the fasteners of Matthies to be threaded fasteners, in order to provide a secure and adjustable connection, as taught by Moscovitch.

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matthies et al. (6,370,019) (of record) in view of Lechner (6,190,172) (of record).

Matthies discloses a tiled display with all the limitations discussed above but lacks optically clear adhesive between adjacent modules. However, Matthies discloses modules connected by mullions (column 6, line 21) as well as the need for the tiles to be arranged so that there are no visible seams (column 6, line 15).

Lechner teaches the use of optically clear adhesive to bond connecting tabs to display screens of a multi-screen display so as not to interfere with the display (column 11, line 21).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Matthies' tiled display with optically clear adhesive instead of mullions to connect adjacent tiles while avoiding pronounced seams between tiles.

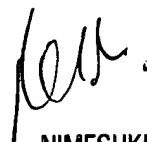
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharlene Leurig whose telephone number is (571) 272-2455. The examiner can normally be reached on Monday through Friday, 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

sll



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